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10/767,043	01/29/2004	Michael Robert Burke	ROC920030035 1US1	4830

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EXAMINER	
PARK, JEONG S	

ART UNIT	PAPER NUMBER
2154	

MAIL DATE	DELIVERY MODE
05/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/767,043	BURKE ET AL.	
	Examiner	Art Unit	
	JEONG S. PARK	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *5/15/2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3, 5-8, 10-19 and 21-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 5-8, 10-19 and 21-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to communications filed May 15, 2008.

Claim Objections

2. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 21-23 are objected to because of the following informalities:

In claim 21, line 9, the phrase "the than the specified maximum number of connections" should be corrected as –the specified maximum number of connections-- for clear understanding of the claim. Similar correction should be made for claim 23.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification (page 8, lines 5-13) describes the connection time interrupt event as "if the number of connections is above the minimum pool size, the application server destroys the timed-out idle connections", therefore the claimed subject matter was not described in the specification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3, 5-8, 10-12 and 15-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Bhogi et al. (hereinafter Bhogi)(U.S. Pub. No. 2004/0088413 A1).

Regarding claims 1, 18 and 19, Bhogi teaches as follows:

a method of configuring a server computer having a connection pool (a dynamically configurable resource pool used in a connection pool for server systems, see, e.g., abstract), comprising:

initializing a connection pool (a initial connection pool size is used to determine the number of connections that the connection pool manager will generate upon initialization of the connection pool, see, e.g., page 5, paragraph [0040]);

generating heuristic override information (interpreted as configuration parameters, see, e.g., page 5, paragraph [0040])(requestor 110 in figure 1, which is a

component of the server 140 in figure 1, generates a request to change the configuration of the resource pool 100 in figure 1, see, e.g., page 3, paragraph [0025], lines 8-11);

wherein the heuristic override information comprises a heuristic override setting and a time period, wherein the heuristic override setting (interpreted as a maximum pool size, see, e.g., page 5, paragraph [0040], lines 21-25) and a time period (maximum time in wait queue, connection reclaim time, and maximum connection idle time which are broadly interpreted as the time period, see, e.g., page 5, paragraph [0040], lines 7-12); and

modifying the connection pool using the heuristic override information (configuration parameters)(the main unit 240 in figure 2 implements the requested new configuration upon receiving a configuration change request while current resource utilization continues undisturbed, see, e.g., page 5, paragraph [0041], lines 1-10).

Regarding claims 2 and 3, Bhogi teaches as follows:

the connection pool is initialized using a plurality of initial settings wherein the plurality of initial settings comprises a maximum number of connections (a initial connection pool size is used to determine the number of connections that the connection pool manager will generate upon initialization of the connection pool, see, e.g., page 5, paragraph [0040], lines 18-21).

Regarding claims 5 and 6, Bhogi teaches as follows:

the heuristic override information comprises a heuristic override setting and a time period, wherein the heuristic override setting comprises a maximum number of

connections (interpreted as a maximum pool size, see, e.g., page 5, paragraph [0040], lines 21-25), wherein the time period comprises at least one of a time of day, a day of week, and a day of year (whenever the requestor 110 in figure 1 generates the request change of configuration it is inherent to have the record of the requested time of day).

Regarding claims 7 and 15-17, Bhogi teaches as follows:

a method of operating a server, comprising:

initializing a connection pool with an initial maximum number of connections (a initial connection pool size is used to determine the number of connections that the connection pool manager will generate upon initialization of the connection pool, see, e.g., page 5, paragraph [0040]);

applying heuristic information (interpreted as configuration parameters, see, e.g., page 5, paragraph [0040])(requestor 110 in figure 1, which is a component of the server 140 in figure 1, generates a request to change the configuration of the resource pool 100 in figure 1, see, e.g., page 3, paragraph [0025], lines 8-11) to modify the maximum number of connections (the main unit 240 in figure 2 implements the requested new configuration upon receiving a configuration change request while current resource utilization continues undisturbed, see, e.g., page 5, paragraph [0041], lines 1-10);

wherein the heuristic override information comprises a heuristic override setting and a time period, wherein the heuristic override setting (interpreted as a maximum pool size, see, e.g., page 5, paragraph [0040], lines 21-25) and a time period (maximum time in wait queue, connection reclaim time, and maximum connection idle time which are

broadly interpreted as the time period, see, e.g., page 5, paragraph [0040], lines 7-12); and

in response to receiving a request to connect (connection requests, see, e.g., page 4, paragraph [0030]):

detecting a current number of connections (request for current connection pool statistics by providing current values for connection pool usage parameters such as total number of connections in the pool and total number of connections in use, see, e.g., page 4, paragraph [0031]); and

if the current number of connections is less than the maximum number of connections, creating a new connection (see, e.g., page 6, paragraph [0048] and figure 8 steps 810 and 815).

Regarding claim 8, Bhogi teaches as follows:

detecting a connection having an unused time (idle time) greater than a time-out value (connection idle time) and deleting the connection (see, e.g., page 6, paragraph [0052], lines 27-33).

Regarding claim 10, Bhogi teaches as follows:

in response to receiving a request to connect, resetting an unused time (maximum idle connection time parameter, see, e.g., page 5, paragraph [0040], lines 31-34) associated with every available connections (it is inherent to reset the idle connection time when receiving connection request).

Regarding claim 11, Bhogi teaches as follows:

if the current number of connections is greater than or equal to the maximum

number of connections, waiting for a connection to become available (the current pool size is equal to the maximum pool size then the wait queue unit 250 in figure 2 places the request for connection on the wait queue, see, e.g., page 6, paragraph [0049] and figure 8 step 810, 840, 845, 850 and 855).

Regarding claim 12, Bhogi teaches as follows:

in response to receiving a close connection request for a connection, indicating the connection as available (when a connection is returned to the connection pool, the connection is available for the connection request waiting in the wait queue unit 250 in figure 2, see, e.g., page 6, paragraph [0049]).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bhogi et al. (hereinafter Bhogi)(U.S. Pub. No. 2004/0088413 A1) as applied to claim 7 above, and further in view of Mousseau et al. (hereinafter Mousseau)(U.S. Pub. No. 2004/0078495 A1).

Regarding claim 13, Bhogi teaches all the limitations of claim except for teaching of Java Database Connectivity connections.

Mousseau teaches as follows:

The Java Database Connectivity (JDBC) component can configure and manage database connectivity such as data sources and connection pools, see, e.g., page 12, paragraph [0153] and [0154]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Bhogi to include JDBC for database connectivity with connection pools as taught by Mousseau in order to efficiently and securely connect the clients to the database via the connection pool.

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bhogi et al. (hereinafter Bhogi)(U.S. Pub. No. 2004/0088413 A1) as applied to claim 7 above, and further in view of Chong et al. (hereinafter Chong)(U.S. Pub. No. 2004/0064552 A1).

Regarding claim 14, Bhogi teaches all the limitations of claim except for teaching of Java 2 Connector connections.

Chong teaches as follows:

The J2C pool is used for physical connections (see, e.g., page 5, paragraph [0062]).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Bhogi to include J2C connection for database connectivity with connection pools as taught by Chong in order to efficiently and securely connect the clients to the database via the connection pool.

10. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhogi et al. (hereinafter Bhogi)(U.S. Pub. No. 2004/0088413 A1) as applied to claim 1 above, and further in view of Yamada et al. (hereinafter Yamada)(U.S. Patent No. 5,365,582).

Regarding claim 21, Bhogi teaches as follows:

the heuristic override information comprises a plurality of rules that specify a time period (maximum time in wait queue, connection reclaim time, and maximum connection idle time which are broadly interpreted as the time period, see, e.g., page 5, paragraph [0040], lines 7-12) and a maximum number of connections (a maximum pool size, see, e.g., page 5, paragraph [0040], lines 21-25);

receiving a heuristic timer interrupt event (receiving request to change maximum number of connections 600 in figure 6, see, e.g., page 5, paragraph [0042]);

determining a current time of day (whenever the requestor 110 in figure 1 generates the request change of configuration it is inherent to have the record of the requested time of day);

in response to the heuristic timer interrupt event (connection requests is interpreted as the heuristic timer interrupt event, see, e.g., page 4, paragraph [0030]);

determining a connection current pool size (request for current connection pool statistics by providing current values for connection pool usage parameters such as total number of connections in the pool and total number of connections in use, see, e.g., page 4, paragraph [0031]); and

adding new connections to the connection pool if the current connection pool size

is less than the than the specified maximum number of connections associated with the current time of day (see, e.g., page 6, paragraph [0048] and figure 8 steps 810 and 815 and).

Bhogi teaches all the limitations of claim with a manual reconfiguration request to change the maximum number of connections as presented above instead of automatic scheduling the maximum number of connections for certain period of time.

Yamada teaches as follows:

a maximum connection number management table with the maximum number of connection defined for each time period (see, e.g., col. 12, lines 12-23); and

the maximum number of connections corresponding to the present time period is read from the pattern data corresponding to the pattern (see, e.g., col. 12, lines 24-37).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Bhogi to include scheduling the maximum number of connections for certain period of time as taught by Yamada in order to automatically change the maximum number of connections based on the predetermined schedule.

Regarding claim 22, Bhogi teaches as follows:

in response to the heuristic interrupt event (interpreted as a configuration request event), initializing a timeout value for all available connections in the connection pool (maximum idle connection time parameter is reset upon the configuration request, see, e.g., page 5, paragraph [0040], lines 31-34).

Regarding claim 23, Bhogi teaches as follows:

receiving a connection timer interrupt event (connection reclaim time parameter, see, e.g., page 5, paragraph [0040], lines 28-31);

in response to the connection timer interrupt event;

determining a connection current pool size (request for current connection pool statistics by providing current values for connection pool usage parameters such as total number of connections in the pool and total number of connections in use, see, e.g., page 4, paragraph [0031]); and

destroying idle connections (expired assigned connection) if the current connection pool size is less than the specified maximum number of connections associated with the current time of day (establishing a connection and initiating a time and the expiration of this timer prompts to return the connection to the pool as available for reassignment, see, e.g., page 6, paragraph [0048] and [0049] and figure 8 steps 810 and 815).

Response to Arguments

11. Applicant's arguments filed 5/15/2008, with respect to claims 1-3, 5-8, 10-19 and 21-23 have been considered but are moot in view of the new ground(s) of rejection.

A. Summary of Applicant's Arguments

In the remarks, the applicant argues as followings:

1) Regarding claims 1, 7 and 18, Applicant respectfully traverses. The cited reference fails to teach "generating heuristic override information, wherein the heuristic override information comprises a heuristic override setting and a time period" and then "modifying the connection pool using the heuristic override information" in claim 4 (now

1). Similarly, the cited reference fails to teach "applying heuristic information to modify the initial maximum number of connections, wherein the heuristic information comprises a maximum number of connections override and a time period" in claim 9 (now 7); and "instructing the computing device to modify the connection pool using heuristic override information, wherein the heuristic override information comprises a maximum number of connections override and a time period" in claim 20 (now 18).

B. Response to Arguments:

In response to argument 1), Bhogi teaches as follows:

generating heuristic override information (requests for current values of the configuration parameters, which inherently means there are existing configuration parameters generated before the configuration request, see, e.g., page 5, paragraph [0040], lines 1-4);

wherein the heuristic override information comprises a heuristic override setting (interpreted as maximum connection pool size)(connection pool configuration parameters includes maximum connection pool size, see, e.g., page 5, paragraph [0040], lines 7-12) and a time period (maximum time in wait queue, connection reclaim time, and maximum connection idle time which are broadly interpreted as the time period, see, e.g., page 5, paragraph [0040], lines 7-12); and

modifying the connection pool using the heuristic override information (request to change the values of one or more configuration parameter, see, e.g., page 5, paragraph [0040], lines 4-6).

Therefore, Bhogi teaches the existing configuration parameters including the time period and the maximum connection pool size are modified based on the request to change the configuration parameter.

Claims are to be given their broadest reasonable interpretation during prosecution, and the scope of a claim cannot be narrowed by reading disclosed limitations into the claim. See In re Morris, 127 F.3d 1048, 1054, 44 USPQ2D 1023, 1027 (Fed. Cir. 1997); In re Zletz, 893 F.2d 319, 321, 13 USPQ2D 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404, 162 USPQ 541,550 (CCPA 1969). In addition, the law of anticipation does not require that a reference "teach" what an appellant's disclosure teaches. Assuming that reference is properly "prior art," it is only necessary that the claims "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it. Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781,789 (Fed. Cir. 1983).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEONG S. PARK whose telephone number is (571)270-1597. The examiner can normally be reached on Monday through Friday 7:00 - 3:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. P./
Examiner, Art Unit 2154

May 21, 2008

/Joseph E. Avellino/
Primary Examiner, Art Unit 2146